

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PAT 01086PCT	FOR FURTHER ACTION	See item 4 below
International application No. PCT/EP2004/000541	International filing date (day/month/year) 23 January 2004 (23.01.2004)	Priority date (day/month/year) 05 February 2003 (05.02.2003)
International Patent Classification (IPC) or national classification and IPC C08G 63/01		
Applicant BASF COATINGS AG		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 9 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.
3. This report contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the report
<input checked="" type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/> Box No. VIII	Certain observations on the international application
4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	Date of issuance of this report 18 September 2005 (18.09.2005)
	Authorized officer Agnes Wittmann-Regis Telephone No. +41 22 338 89 70

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

Translation

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference

PAT 01096PCT

Date of mailing
(day/month/year)

See form PCT/ISA/210

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/EP2004/000541

International filing date (day/month/year)

23-01-2004

Priority date (day/month/year)

05-02-2003

International Patent Classification (IPC) or both national classification and IPC

C08G 53/91

Applicant

BASF COATINGS AG

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input checked="" type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Date of completion of this opinion

Authorized officer

Facsimile No.

Telephone No.

Form PCT/ISA/237 (cover sheet) (April 2005)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/000541

Box No. I

Basis of the report

1. With regard to the language, this opinion has been established on the basis of:
☐ the international application in the language in which it was filed
☐ the translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rule 12.3(a) and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ on paper
☐ in electronic form
 - c. time of filing/furnishing
☐ contained in the international application as filed
☐ filed together with the international application in electronic form
☐ furnished subsequently to this Authority for the purposes of search
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/000541

Box No. II

Priority

1. ☒ The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43bis.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

Form PCT/ISA/237 (Box No. II) (April 2005)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		International application No. PCT/EP2004/000541
Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement		
Novelty (N)	Claims 17-18, 15	YES
	Claims 1-14, 16, 19, 21	NO
Inventive step (IS)	Claims 1-19, 21	YES
	Claims 1-19, 21	NO
Industrial applicability (IA)	Claims 1-19, 21	YES
	Claims 1-19, 21	NO
2. Citations and explanations:		
Reference is made to the following documents:		
D1: US-A-6 150 458 (WEIKARD JAN ET AL) 21 November 2000 (2000-11-21)		
D2: US-B1-6 194 596 (SILBER STEFAN ET AL) 27 February 2001 (2001-02-27), cited in the application		
D3: EP-A-0 992 480 (UCB SA) 12 April 2000 (2000-04-12)		
D4: US-A-4 330 643 (OGASAWARA TAKAHISA ET AL) 18 May 1982 (1982-05-18)		
D5: DATABASE WPI Section Ch, Week 199941 Derwent Publications Ltd., London, GB; Class A23, AN 1999-489027 XP002278904 & JP 11 209730 A (TOYOBO KK), 3 August 1999 (1999-08-03)		
D6: DATABASE WPI Section Ch, Week 199436 Derwent Publications Ltd., London, GB; Class A12, AN 1994-290946 XP0022789805 & JP 06 220148 A (NIPPON KAYAKU KK) 9 August 1994 (1994-08-09)		
D7: DATABASE WPI Section Ch, Week 199806 Derwent Publications Ltd., London, GB; Class A23, AN 1998-059235 XP002278906 & JP 09 302054 A (NIPPON SYNTHETIC CHEM IND CO) 25 November 1997 (1997-11-25)		
D8: WO 99/08802 A (MEISENBURG UWE; BASF COATINGS AG (DE); HESSELMAIER ANDREA (DE); JO) 25 February 1999		

Form PCT/ISA/237 (Box No. V) (April 2005)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		International application No. PCT/EP2004/000541
Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
(1999-02-25)		
D9: US-A-5 069 929 (ARAI TETSUZO ET AL) 3 December 1991 (1991-12-03).		
PCT Article 33(2):		
Claim 1 concerns a polyester.		
Document D1 discloses the same combination of technical features as claim 1 (column 2, lines 1-11; column 4, lines 11-16; claims and examples).		
The same applies to documents D3 (page 3, lines 43-64; page 2, lines 39-41; claims and examples), D4 (column 3, lines 3-64; column 7, line 67, to column 8, line 49; column 9, lines 31-41; claims and examples), D5, D6 and D7.		
Consequently, the subject matter of claim 1 does not meet the requirements of PCT Article 33(2).		
The same also applies to the subject matter of claims 2 to 14, 16, 19 and 21, which concern routine embodiments and are known from the prior art, as well as to the subject matter of claims 19 and 21.		
Claims 17 and 18:		
None of the documents discloses the same combination of technical features as claims 17 and 18.		

Form PCT/ISA/237 (Box No. V) (April 2003)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/EP2004/000541

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

Consequently, the subject matter of claims 17 and 18
meets the requirements of PCT Article 33(2).

PCT Article 33(3):

Claims 1 to 14, 16, 19 and 21:

If amended main claims are submitted which meet the
requirements of PCT Article 33(2), the applicant should
highlight the distinguishing technical feature and either
show that it results in a surprising technical effect or
credibly demonstrate that this feature cannot readily be
derived from the prior art.

The same also applies to the subject matter of claims 2
to 14, 16, 19 and 21, which concern routine embodiments
and are known from the prior art.

Claim 15:

A person skilled in the art would replace (meth)acrylic
acid esters with (meth)acrylic acid without exercising
inventive skill.

Consequently, the subject matter of claim 15 does not
satisfy PCT Article 33(3).

Claims 17 and 18:

Document D3 is considered the closest prior art (page 2,
lines 39-41). The difference between document D3 and
claim 17 lies in the fact that in claim 17 the polyester

Form PCT/ISA/237 (Box No. V) (April 2005)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/000541

Box No. V

Reasoned statement under Rule 49bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

is reacted with the (meth)acrylic acid using an enzyme as catalyst and not, as in document D3, with the aid of microwaves. Since no comparative example with respect to document D3 is available, the objective technical problem is that of providing a further method for the esterification of polyesters using (meth)acrylic acid.

Document D2 discloses that an enzymatic method can be used for the esterification of polyester polyols using (meth)acrylic acid (column 5, lines 3-10; and column 6, lines 51-64). Consequently, the prior art documents suggest carrying out the esterification with the aid of enzymes as catalysts.

The subject matter of claim 17 therefore fails to meet the requirements of PCT Article 33(3).

The same applies to the subject matter of claim 18.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/EP2004/000541

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

PCT Article 6:

Claims 1 and 17 are unclear insofar as the "group activatable using actinic radiation" is not defined clearly.

In addition, the polyesters are defined in terms of their production. This definition does not make the polyesters novel over, for example, polyesters containing acrylate groups. The applicant would have to demonstrate that the present polyesters have different technical properties.

Claim 7 is not supported by the description (page 11, lines 24-30) because in this case the enzyme is a hydrolase.

Claim 8 is not supported by the description (pages 11-12) because in this case the organisms contain a lipase.

Claim 12 is not supported by the description.

PCT Article 33(4):

The subject matter of all the claims is industrially applicable.